(54) **INFORMATION PROCESSOR**

(57) Abstract:

PURPOSE: To detect at a high speed a case where an overlap process is not required and to improve the performance of an MVC instruction by providing an overlap detecting circuit which detects the overlap between a memory operand and a memory area in the different methods.

CONSTITUTION: One or plural 1st detecting circuits the discordance of one or plural bits whose source and destination addresses are previously decided. Meanwhile one or plural 2nd detecting circuits detects the coincidence of one or plural bits set previously. One or plural 3rd detecting circuits detects whether a bit whose source or destination address is previously decided is equal to 0 or 1. Then a deciding circuit decides a case where the correct result is obtained despite the shift carried out for each word at execution of a data shift instruction (MVC instruction) which shifts the operand data on a memory with the outputs of the 1st-3rd detecting circuits. These detecting circuits and deciding circuit form a high speed overlap detecting circuit 6. Thus it is possible to detect at a high speed an overlap state that breaks an operand and to improve the cost performance.